FIG. 1

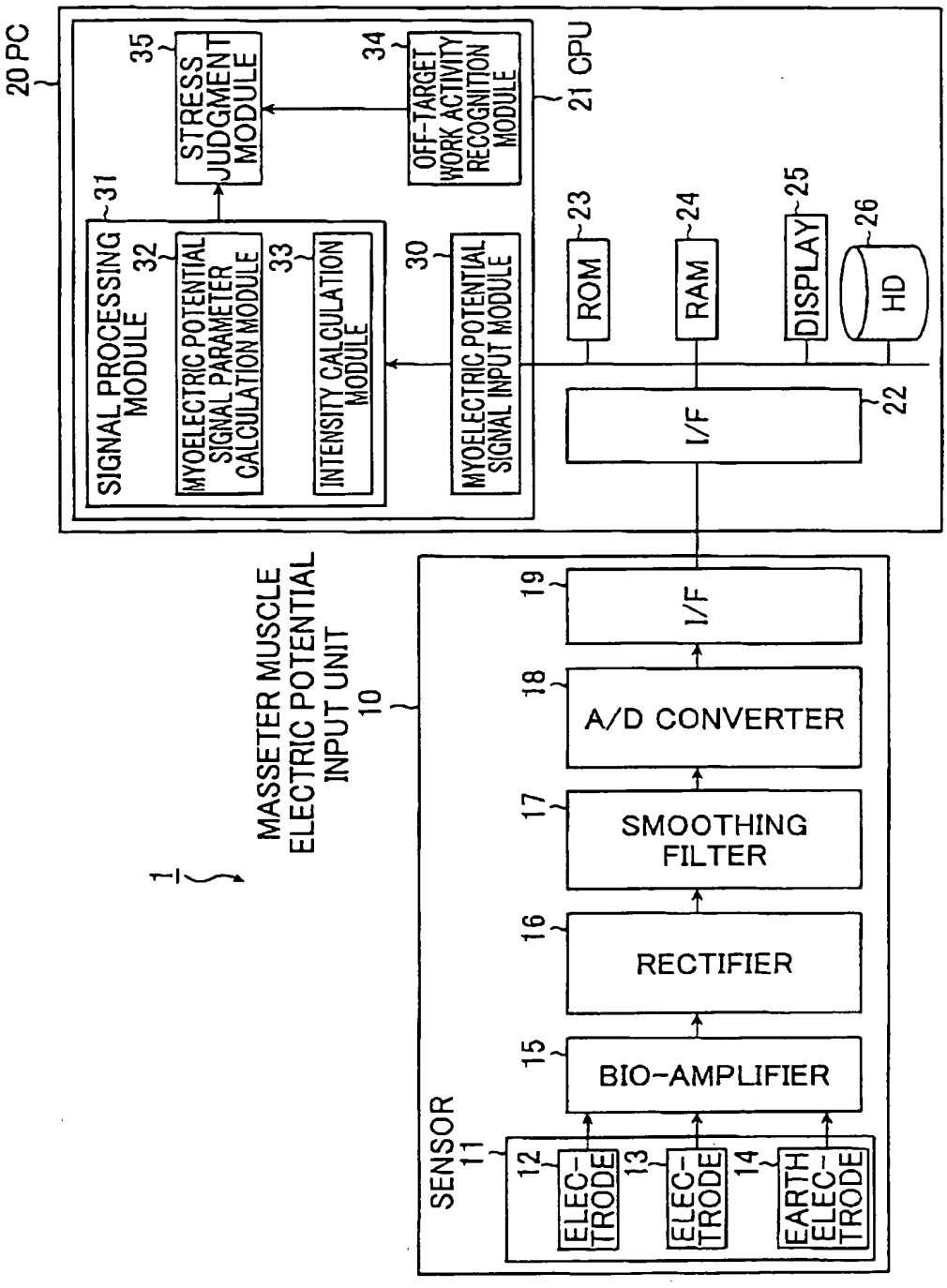

1
MASSETER MUSCLE ELECTRIC POTENTIAL INPUT UNIT
10
SENSOR
11
12 ELEC-TRODE
13 ELEC-TRODE
14 EARTH ELEC-TRODE
15 BIO-AMPLIFIER
16 RECTIFIER
17 SMOOTHING FILTER
18 A/D CONVERTER
19 I/F
20 PC
21 CPU
22 I/F
23 ROM
24 RAM
25 DISPLAY
26 HD
30 MYOELECTRIC POTENTIAL SIGNAL INPUT MODULE
31 SIGNAL PROCESSING MODULE
32 MYOELECTRIC POTENTIAL SIGNAL PARAMETER CALCULATION MODULE
33 INTENSITY CALCULATION MODULE
34 OFF-TARGET WORK ACTIVITY RECOGNITION MODULE
35 STRESS JUDGMENT MODULE

FIG. 2

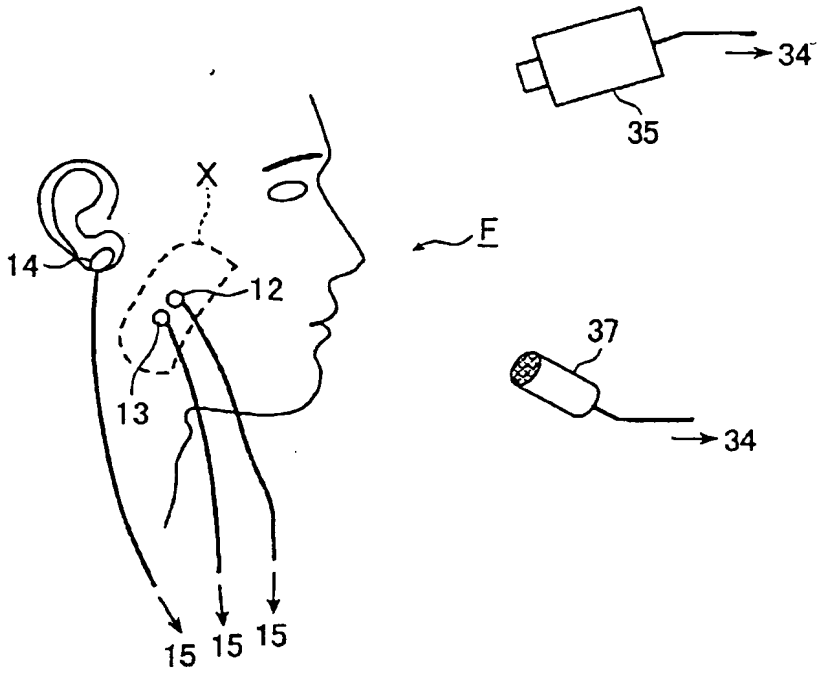


FIG. 3

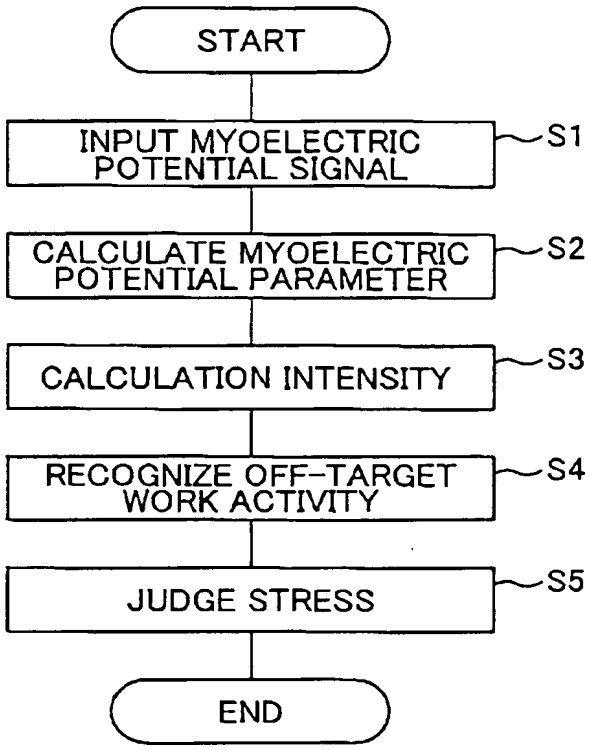

START
INPUT MYOELECTRIC POTENTIAL SIGNAL
S1
CALCULATE MYOELECTRIC POTENTIAL PARAMETER
S2
CALCULATION INTENSITY
S3
RECOGNIZE OFF-TARGET WORK ACTIVITY
S4
JUDGE STRESS
S5
END

FIG. 4

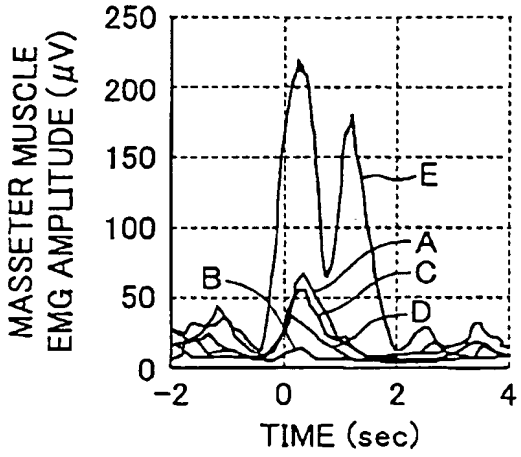

MASSETER MUSCLE EMG AMPLITUDE (μV)
250
200
150
100
50
0
−2
0
2
4
TIME (sec)
A
B
C
D
E

FIG.5

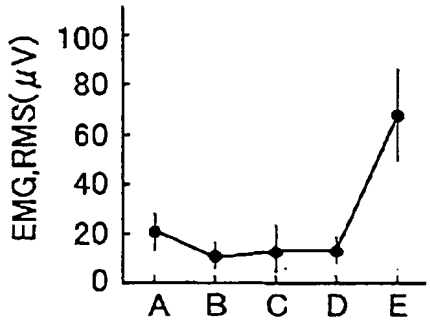
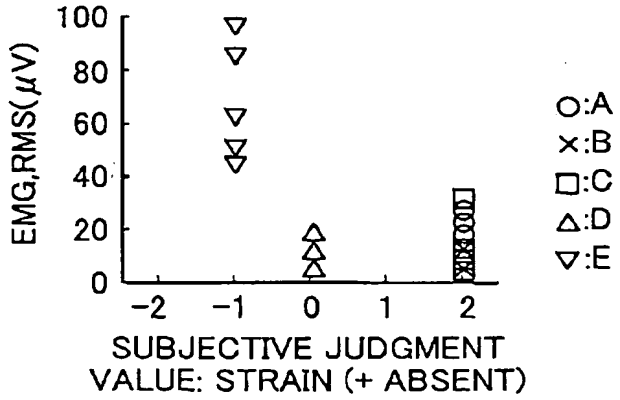



FIG.6



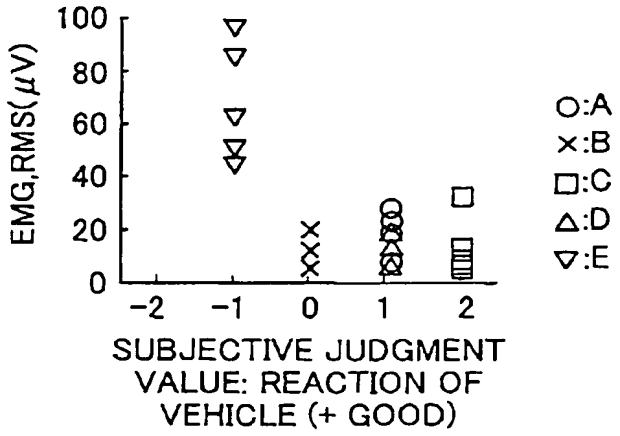


FIG.7